

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,074	10/06/2003	Scott Houston Meiere	D-21358	4063
27182 75	90 01/17/2006		EXAM	INER
PRAXAIR, INC.			NAZARIO GONZALEZ, PORFIRIO	
	MENT - M1 557		4 D.T. I.D. III	DARED 1819 (DAR
39 OLD RIDGEBURY ROAD			ART UNIT	PAPER NUMBER
DANBURY, CT 06810-5113			1621	<u>.</u>

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Water to		
	Application No.	Applicant(s)
Office Action Commence	10/678,074	MEIERE ET AL.
Office Action Summary	Examiner	Art Unit
	Porfirio Nazario-Gonzalez	1621
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet with th	ie correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR of after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAT 1.136(a). In no event, however, may a reply but will apply and will expire SIX (6) MONTHS tute, cause the application to become ABAND	TON. be timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on		
	nis action is non-final.	
Since this application is in condition for allow closed in accordance with the practice under	vance except for formal matters,	•
Disposition of Claims		
4) ☐ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdreds 5) ☐ Claim(s) 20 is/are allowed. 6) ☐ Claim(s) 1-16 and 18 is/are rejected. 7) ☐ Claim(s) 17 and 19 is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9) The specification is objected to by the Examin		
10)☐ The drawing(s) filed on is/are: a)☐ ad		
Applicant may not request that any objection to the	÷,,	· ·
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the		·
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Appli iority documents have been rec eau (PCT Rule 17.2(a)).	cation No eived in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Sumn	nary (PTO-413)
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 	Paper No(s)/Ma	

Application/Control Number: 10/678,074 Page 2

Art Unit: 1621

DETAILED ACTION

Information Disclosure Statement

1. The last reference listed on page 1 of the PTO Form 1449 was not considered because a copy of said reference was not provided. Further, pages 2-4 of the PTO Form 1449 were also not provided. Applicants are requested to provide said pages and references when responding to this Office Action for prompt consideration.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "or greater" is indefinite because it does not clearly set forth the metes and bounds of the claims. In the instant case the phrase does not set an upper limit for the range (in claims 5 and 6) or the upper limit amount (in claims 2-4).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-5, 7-12, and 16-18 rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 6,175,027 B1, cited by Applicants. The '027 patent discloses a one pot

Application/Control Number: 10/678,074 Page 3

Art Unit: 1621

synthesis of bis(N-Butylcyclopentadienyl)zirconium dichloride in large scale amounts. See Example 6.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 1-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balboni et al., Inorganic Chemistry, Vol. 40, No. 26, pp. 6588-6597 (2001). The Balboni et al.

Application/Control Number: 10/678,074 Page 4

Art Unit: 1621

reference teach the one-pot synthesis of Group 4 dimethylmetallocenes. Particularly, the Balboni et al. reference teach the addition of a lithium alkyl to an indene compound to form a lithiated indene compound followed by the addition of a Group 4 transition metal halide to form a solution of the Group 4 dimethylmetallocene. See experimental section and Table 1 on page 6589. The reference differs from the instant claims in that the one-pot method is not performed in large scale amounts. However, it is with the perview of one skilled in the art to adjust the amounts reactants used in order to run the reaction at large scale. Merely modifying the process conditions such as temperature and concentration is not a patentable modification absent a showing of criticality. In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

Allowable Subject Matter

- 9. Claims 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. Claim 20 is allowed over the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Porfirio Nazario-Gonzalez whose telephone number is 571-272-0641. The examiner can normally be reached on Mon.-Fri. (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/678,074

Art Unit: 1621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Poi/firio Nazario-González Primary Patent Examiner / Page 5

rt Unit 1621

PNG

December 12, 2005